

REMARKS:

1. Objections and Rejections

Claims 1 and 3 stand objected to as including a typographical error. Claims 1-6 stand rejected under 35 U.S.C. § 112, ¶1, as allegedly failing to comply with the written description requirement. Claims 1-6 stand rejected under 35 U.S.C. § 102(b), as allegedly clearly anticipated by each of Japanese Patent Publication No. JP-A-7-280484 to Tomoko (“Tomoko”) and U.S. Patent No. 2,360,123 to Gerstung *et al.* (“Gerstung”). Applicants respectfully traverse.

2. Claim Objections

Claims 1 and 3 stand objected to as including a typographical error. In accordance with the Examiner’s suggestions, Applicants have amended claims 1 and 3 to insert the word “of” between the word “length (T)” and the word “an.” Therefore, Applicants respectfully request that the Examiner withdraw the objections to claims 1 and 3.

3. 35 U.S.C. § 112, ¶1

Claims 1-6 stand rejected as allegedly failing to comply with the written description requirement. Specifically, the Office Action alleges that “[t]here is no support for [the limitation] a length (T) of an outer surface and an inner surface.” Office Action, Page 2, Line 20. The Office Action also asserts that “[a]s disclosed with respect to Figure 5 (page 8), the connecting portion length (T) is determined by the distance between first and second critical points in the upper portion of the fin and/or the distance between third and fourth critical points in the lower fin.” *Id.* at Lines 20-23. “As shown in Figure 5, the connecting portion length (T) is determined by critical points on the inner surface of the fin. *Id.* at Lines 23 and 24. “With reference to the outer surface of the fin, the critical points would provide [an outer surface] connecting portion length (T) unequal to the inner surface connection [length].” *Id.* at Page 3, Lines 1 and 2. Applicants respectfully traverse.

Referring to **Fig. 4**, in Para [0037] of the specification, Applicants state that “[l]ength (T) of each connecting portion 26 and 27 in the longitudinal direction of each waving strip is less than or equal to thickness (t) of a plate forming each waving strip.” Applicants further note that as evidenced by the termination of the element lines, portions 26 and 27 refer generally to the connecting portion. Thus, although length (T) may be described with respect to one surface of the waving strip, length (T) applies to the entire connecting portion. Appl’n, **Figs.**

4 and 5. Referring to Figs. 5 and 6, thickness (t) is equal to or greater than length (T), respectively. See Appl'n, Para. [0038] and [0039]. Moreover, in Para. [0043], Applicants explain that length (T) should not be greater than thickness (t) if deformation and strain is to be avoided.

Contrary to the foregoing remarks, the Office Action's mark-up of Fig. 5 shows length (T) greater than thickness (t) and, thus, this mark-up is contrary to the disclosure in the application. According to Applicants' claim 1, "a length (T) of an outer surface and an inner surface of each connecting portion in said longitudinal direction of each waving strip is less than or equal to about a thickness (t) of a plate forming each waving strip." (Emphasis Added.) See also Appl'n, Claim 3. Therefore, Applicants maintain that because the Office Action's interpretation of length (T), as depicted in the mark-up of Fig. 5, would be in conflict with Applicants' claims and specification, the Office Action's interpretation of length (T) cannot form the basis for a lack of written description rejection.

In view of the depictions in Figs. 4-6, those of ordinary skill in the art would understand that the length (T) of Applicants' claimed connection portion is less than or equal to thickness (t) of the waving plates at both the inner surface and the outer surface of the connection portion. Therefore, Applicants respectfully request that the Examiner withdraw the written description rejections.

4. 35 U.S.C. § 102(b)

Claims 1-6 stand rejected as allegedly, clearly anticipated by each of Tomoko and Gerstung. "A claim is anticipated if and only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," and "the identical invention must be shown in as complete detail as contained in the claim." MPEP 2131. The Office Action alleges that either Tomoko or Gerstung describe each and every element as set forth in claims 1-6. Applicants respectfully traverse.

As noted above, Applicants claims 1 and 3 describe a fin for a heat exchanger comprising a plurality of waving strips, in which "adjacent waving strips are connected at connecting portions between said first flat portions of said adjacent waving strips and between said second flat portions of said adjacent waving strips, [wherein] a length (T) of an outer surface and an inner surface each connecting portion in said longitudinal direction of each waving strip is less than or equal to about a thickness (t) of a plate forming each waving strip." (Emphasis added.) As such, Applicants' claimed invention describes the connecting length (T) of the outer

and the inner surface of the connecting portion as less than or equal to about the plate thickness (t). (Emphasis added.) This relationship is described further in claims 2 and 4.

a. Tomoko: The Office Action alleges that Tomoko discloses each and every element of the claimed invention. However, in claims 1 and 3, Applicants claim that “a length (T) of an outer surface and an inner surface of each connecting portion [26 and 27] in said longitudinal direction of each waving strip is less than or equal to about a thickness (t) of a plate forming each waving [strip].” Appl’n, Claims 1 and 3. Referring to **Fig. 13** and Para. [0005] of the application, Applicants state that with respect to Tomoko, “[c]onnection length is about $L/2$, which is about one-half of the length of one raised portion and about one-half the length of one depressed portion.” Clearly, connection length $L/2$ is not less than or equal to thickness (t). Therefore, Tomoko does not disclose each and every element of the invention, as described in Applicants’ claims 1 or 3 or the claims dependent therefrom. Applicants respectfully request that the Examiner withdraw the anticipation rejections based on Tomoko.

b. Gerstung: Gerstung states that “[t]he corrugations in the elements 47 are approximately rectangular in contour and are flat crested and the adjoining elements of each plate are, except where the crests of their corrugations overlap, separated from each other to provide openings 48 through which oil may pass from one corrugation to another lengthwise of the plate.” Gerstung, Page 2, Column 1, Lines 60-66 (emphasis added). Applicants maintain that because this description distinguishes between openings 48 through which oil is permitted to flow, which are separated from the adjoining elements of each plate, and “where the crests of their corrugations overlap,” the overlapping areas of Gerstung’s crests are not separated from the adjoining elements of each of Gerstung’s plates. Consequently, Applicants maintain that Gerstung does not disclose a length (T) of the connecting portion that is less than or equal to Gerstung’s plates thickness (t). Therefore, Gerstung does not disclose each and every element of the invention as described in Applicants’ claims 1 or 3 or the claims dependent therefrom. Applicants respectfully request that the Examiner withdraw the anticipation rejections based on Gerstung.

CONCLUSION

Applicants respectfully submit that this application, as amended, is in condition for allowance, and such disposition is earnestly solicited. If the Examiner believes that a further interview with Applicants' representatives, either in person or by telephone, would expedite prosecution of this application, we would welcome such an opportunity. Applicants believe that no additional fees are due as a result of this responsive amendment. Nevertheless, in the event of any variance between the fees determined by Applicants and those determined by the U.S. Patent and Trademark Office, please charge any such variance to the undersigned's Deposit Account No. 02-0375.

Respectfully submitted,

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Enclosures